REMARKS

Applicant has amended claims 1, 3—6, 9, 10, and 13, and canceled claims 2, 7, 8, 11, 12, and 14—30. Claims 31—36 have been added. Claims 1, 3—6, 9, 10, and 13, and 31—36 are pending in the present application.

In the present Office Action, claims 1, 6, and 7 were rejected under 35 U.S.C. 112, second paragraph, for indefiniteness.

The Examiner stated "Claim 1 recites the limitation 'generating a modified bilateral filter by reformulating an initial bilateral filter'. It is not clear what has been modified."

Applicant notes that claim 1 recites "... generating a modified bilateral filter by *reformulating an initial bilateral filter* for each pixel location in the image into a sum...". Applicant believes that it is clear from the claim language that "an initial bilateral filter" is what has been modified in claim 1. This "initial bilateral filter" is known in the art, and also described in detail in Applicant's Specification, in paragraphs 15—22. Therefore, Applicant believes that claim 1 (in its original form, and in amended form) is not indefinite.

Claim 6 was rejected under 35 U.S.C. 112, second paragraph, for indefiniteness due to "insufficient antecedent basis". Claim 6 has been amended to indicate that the claim now depends from claim 3, which includes the proper antecedent basis for claim 6.

Claims 8, 9, 11, 12, and 19 were objected to as being dependent claim, but were indicated as being allowable if rewritten in independent form including the limitations of the base claim and any intervening claims.

Applicant has amended claim 1 to incorporate the limitations of original claims 2 and **8**. Claims 3—6, as amended to indicate correct dependence, now depend from a claim that is in allowable form. Claim **9** has been amended to incorporate the limitations of original claims 1 and 2. Claim 10 has been amended to incorporate the limitations of

original claim **11**. Claim 13 has been amended to incorporate the limitations of original claim **19**. Therefore, claims 1, 3—6, 9, 10, and 19 should now be in condition for allowance.

Claim 2 was rejected under 35 U.S.C. 103(a) as being unpatentable over Tomasi, et al. in view of August. However, Applicant notes that August's application of a Taylor series expansion does not provide a directly useful result, as, among other things, August's teachings are applicable to an entirely different type of filter (i.e., a *Volterra* filter) than the bilateral filter employed in Applicant's claimed invention. August states that, after a Taylor series expansion is performed, further, complex analysis (via Tensors and generalized cumulants) is necessary to yield a useful result:

August states [paragraph 0356] "the coefficients in a Taylor series expansion of a cumulant generating functional are by definition the cumulants, and therefore we need to obtain the cumulants of $Y=f(X)$, a (quadratic) polynomial in X. Unfortunately, the cumulants of Y are not directly known; we must somehow calculate them in terms of the (known) cumulants of X. ... [paragraph 0358:] Without appropriate tools, calculating the cumulants of a polynomial can be extraordinarily difficult. To aid in this task, a tensor formalism can be used for representing moments, cumulants, and so-called generalized cumulants."

Applicant has amended original claim 1 to incorporate original claim 2, to yield new claim 31. Applicant's original claim 2 recites "...buffering a neighborhood of said pixels as determined by the size of the bilateral filter convolution kernel Kj". As noted above, August's teaching does not provide a use of the Taylor series that is at all analogous to the method in which the Taylor series is used in Applicant's original claim 2. To the contrary, the teaching of August indicates that a Taylor series expansion is alone insufficient to produce a useful result in the particular context in which use of a taylor series was referenced, which is not the same or similar context in which Applicant's

original claim 2 recites the use of the Taylor series. In further distinction, Applicant's use of a taylor series produces an immediately useful result.

Thus the teaching of August, i.e., the use of a Taylor series expansion for a different purpose than that employed by Applicant's claimed invention, cannot be considered as a motivation to use a Taylor series expansion in the context of Applicant's claims, including claim 31. Therefore, Applicant maintains that August does not teach the use of a Taylor series in the context of new claim 31, and thus cannot be used to show obviousness of the claim. It follows that dependent claims 32—36, which depend from claim 31, should also be allowable.
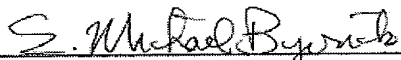
For at least the reasons set forth above, Applicant believes that the present claims patentably distinguish over the applied references, and thus requests that pending claims 1, 3—6, 9, 10, 13, and 31—36 be allowed in view of the amendments made thereto.

If, in the Examiner's opinion, prosecution of the present application may be expedited with a telephone conference, the Examiner is encouraged to contact the Applicants' attorney.

There are now a total of 14 pending claims, including 5 independent claims. Thirty (30) total claims and 7 independent claims were paid for at the initial filing. Accordingly, it is believed that no further fees are due in connection with this amendment. If any additional fee is due, please charge Deposit Account No. 08-2025.

Respectfully submitted,

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